Idaho Technology Pilot Grant

Legislative Report Template

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Purpose of Legislative Report

Because the intent of these legislative funds is to promote a scalable and sustainable model of technology learning initiative in Idaho, awardees will be required to submit periodic evaluation updates and yearly reports to the State Department of Education and the Idaho Legislature. It is expected that grantees will be available for scheduled site visits throughout the project from educational stakeholders.

Furthermore, in an effort to provide a display of best practices of technology integration processes, pedagogy, professional development and leadership, awardees will be required to provide a final dissemination report and video. Specific details regarding the requirements and length will be provided to awardees as the pilot grant project moves forward into Fiscal Year 2014. Reports will be submitted by grantees January 2014, June 2014 and December 2014.

Examples of Measurements

Examples of measurements for grantees to accumulate and report on include, but are not limited to the following:

- Student and teacher attendance
- Teacher attitude and retention
- Teacher evaluations
- Student discipline
- Student graduation/dropout rates
- Student participation
- Student surveys, measuring what students think and believe
- Fiscal and academic measurements of paperless environments)
- Efficiencies documented throughout the project
- Project cost over time
- Recurring school and classroom trend
- Student achievement in reading, science and math
- Advanced learning opportunities for all students)

Topics to be Included Within Legislative Report

Within the subheadings below, please provide information, feedback and data (where possible) on the following items:

1. Retrospective summary since grant was awarded
2. Initial obstacles to overcome
3. Baseline student achievement data, as per project proposal
4. Other baseline quantitative data collected
5. Professional development/teacher discourse
6. Device rollout
7. Student discipline/digital citizenship
8. Fiscal savings/budget update
9. Next steps/project revisions

Retrospective Summary

Grant Goal	Retrospective Summary
1. Expand the Career Information System (CIS) implementation	MHS has aligned it's advisory program to utilize CIS as a resource available to teachers and students; however, in developing the MHS student portfolio (grant goal #4) many of the CIS student requirements have been transitioned from MHS' main advisory curriculum to be used as a supplementary advisory curriculum that assists to facilitate the creation of the student's four-year portfolio.
2. Allow the maximized use of our collaborative learning management system (LMS), My Big Campus (MBC)	MHS has seen an increased use in My Big Campus in a variety of ways. It has been utilized to provide information and resources to students. It's also been used as a way to facilitate discussions and schoolwork assignments. The IT Help Desk students were able to complete a Google Ninja curriculum (via MBC) that was facilitated by certified instructors as well as the Technology Department. This provided the IT Help Desk students with multiple instructors, the flexibility to work at their own pace and to receive individualized assistance. Teachers report using MBC 79% of the time. Between MBC and GAFE, teachers also report using the teacher-student collaborative features 79% of the time and the student-student collaborative features 75% of the time.
3. Promote communication, collaboration, cloud storage and improved efficiencies through the integration of Google Apps for Education (GAFE)	MHS at the onset of the school year immediately transitioned to Google. Students received training during laptop deployment sessions and greatly utilize its cloud based storage. The majority of teachers and students surveyed report they use GAFE over 80% of the time. Prior to this initiative, 51% of students surveyed reported never having used GAFE.
4. Foster critical thinking, creativity and a positive digital footprint through the creation of a four-year website portfolio articulating the student's academic growth.	MHS has used building-level leadership to facilitate and create the student portfolio requirements/rubrics. The student portfolio has been presented to all staff and students. By the end of January, all senior portfolios will be created using Google sites. Prior to this initiative, 73% of students surveyed report that they had never created a website before.

Initial Obstacles to Overcome

Budget

The first obstacle we had to overcome was determining how to maximize the amount of funding the grant provided us. Our original grant request was $585,175.00. The amount funded was $427,878.32. This was nearly $160,000 difference in funding, which was made up with in-kind funding from our District. Funding for items submitted in the original budget that the District covered during the implementation year are: laptops for the student growth, hot spare batteries, battery chargers, filtering licenses, additional wireless access points and laptop protective sleeves. Teacher devices were not purchased due to the lack of funds.

District and MHS Administration decided in favor of providing students a laptop without charging them additional fees nor did the District collect money for insurance.

When Middleton High School applied for the grant budgeting was based on a five-year historic growth. MHS ended the 2013 school year with 959 student enrollment and with the 5% anticipated growth our budgeted student enrollment count came to 1,003. On October 8 of the 2013-2014 school year, student enrollment had increased to 1,087, which was a 13.35% gain.

Device

Another challenge that we faced was that the laptop was not the appropriate device for all students. It was determined that our special needs (special education) students would benefit from the assistive technologies that a touch device could provide. The District determined that an iPad was the appropriate device allowing them a more interactive device for the needs of those particular students (numbering about 17) and it has been successful based off the observations of the Technology Integration Specialist.

Teachers

The timing of the grant was an initial challenge for teachers as award notification was given during the summer on July 1, leaving very little preparation time. Upon returning to the building for the fall term, the majority of computer labs had been removed and re-distributed district-wide. Because laptops were not deployed until mid-September to early October, teachers were left with fewer desktop computers in the building than in the previous years.

In addition to fewer computers for a period of time, another challenge was that the teachers did not have a laptop. This was challenging in that staff did not have the time/resources to become familiar with its functionality and software. It also made providing professional development in a mobile setting more challenging.

Beyond that device, a major shift was the transition to Google. Teachers initially struggled with the cloud-based nature of Google and managing the paper flow; however, through professional development, one-on-one support and collaboration with other staff members, most of the major struggles have been resolved.

A building-level survey was given to staff and students in January 2014. Some of the comments from both parties showed that they appreciated the collaborative features of using Google; however, they felt that in some instances it was not the appropriate tool. For example, two PTE teachers did not find the spreadsheet features of Google as robust as what their students needed. The solution that we put in place was to allow OpenOffice to be installed on the laptops, which was a tool that alleviated this concern. In addition to OpenOffice, the math department faced challenges when it came to needing specialized software programs. Prior to the 1:1 implementation, SketchPad and Fathom were installed on the computers in the lab. As math teachers requested software is put onto student laptops, we had to ensure the District was in compliance with the amount of software licenses purchased. This delayed the process of installing the software; however, we were able to work through the process of verifying licenses and the software was installed. The survey also revealed that 54% of teachers report using specialized software that is not web-based. This re-assures the necessity of a fully-functional laptop.

Lastly, teachers have been impacted by the students who opt-out of the laptop program entirely. They cite noticeable differences in the engagement level and find it challenging to prepare for lessons that integrate technology and to make accommodations for those without devices.

Students

Most of the student challenges stemmed from understanding how to use the technology and were resolved in a very short period of time. Students are required to authenticate to our school's network. This created some issues as students are allowed to take laptops home. When logged in at school, students are automatically authenticated. When logged in at home, students must go through the authentication process. This was resolved by continually educating students about how they log in at home versus school. In addition, we created a 1:1 website (www.mhs1-1.com) to provide updates, paperwork and video tutorials to assist stakeholders.

Another challenge that students faced was being on a different Google domain than staff. When staff would share documents with students, it would prompt students to log into the staff domain. This was easily resolved by an order of procedures that the students followed to ensure they would not be asked to sign into the staff domain. One aspect that we should have taken more time to work on with students during the initial deployment was how to utilize Google Drive offline. However, once students became familiar with their Google Drive the transition from online to offline access happened naturally.

Finally, a challenge for students was to establish a routine where they would charge their laptops every evening. A majority of the IT Assist tickets (see Table #7) submitted by students are battery related and most of those are a result of a battery that was not fully charged at the start of the school day. In order to combat this we have helped educate students by monitoring habitual battery offenses and offering assistance.

Parents

Initial parental concerns revolved around the monitoring and data tracking of students, as well as student access to inappropriate, non-education related sites. Parents also showed concern about having students take the laptop home. We give parents the option to allow their child to "check in and check out" their laptops or take their laptops home. The majority of parents allow their child to take the school device home (see Table #5). We logged a majority of questions about policy and the procedures we were putting in place. We offered several parent nights and communications to help educate parents about these options (http://www.mhs1-1.com/faqs.html).

Parents were apprehensive about the responsibility a 1:1 program places on their children. However, we offer the device at no charge to students/parents. Students also check out a laptop sleeve that helps protect their laptop. Students are educated with digital citizenship lessons to assist in preventing a negative digital footprint. Parent concerns have subsided due to students embracing the responsibility.

Baseline Student Achievement Data

Table 1

SAT - 2013	Idaho Mean	Junior Scores (208)	Senior Scores (13)
Reading Mean	**454**	431	545
Math Mean	**459**	416	509
Writing Mean	**6.6**	6.3	6.8
Writing	**45.5**	42.6	52.0

Table 2

PSAT - 2013	Idaho Mean Sophomore	Sophomore Scores (277)	Idaho Mean Juniors	Junior Scores (69)
Reading Mean	**47.1**	40.7	**48.4**	47.8
Math Mean	**47.2**	40.4	**48.4**	47.0
Writing Mean	**45.8**	38.9	**47.0**	46.2

Table 3

Data Reported	2012	2013
Attendance (Fall Semester)	94.99%	94.77%
Graduation Rate	95%	June Report
Dropout Rate	4%	June Report

Table 4

GPA Rate 1st Semester (2013-2014)	Class of 2014 (231)	Class of 2015 (243)	Class of 2016 (276)	Class of 2017 (285)
Below 2.0	53 (23%)	63 (26%)	77 (28%)	74 (26%)
2.0-2.5	32 (14%)	38 (15.6%)	29 (10.5%)	36 (12.6%)
2.5-3.0	28 (12.1%)	30 (12.3%)	35 (12.6%)	27 (9%)
3.0-3.5	43 (18.6%)	50 (20.5%)	57 (20.6%)	56 (19.6%)
3.5-4.0	75 (32.4%)	62 (25.5%)	78 (28.2%)	92 (32.2%)

Other Baseline Quantitative Data

Table 5

Student Participation Choices	Percent of Student Participation
Take home laptop	95%
Check in/Check out laptop	4%
Opt out of program	1%
Students with Internet Access at home	90%

Table 6

Repairs	Amount of Repairs	Percent of Repairs
LCD Monitor Issues	49	33%
Hard Drive Issues	17	11%
Keyboard Issues	21	14%
Motherboard Issues	5	3%
Other Issues	57	38%

Table 7

IT Assist Ticket Issue Categories	Tickets	Percent of Total
Batteries	903	55%
Laptop blue screened	112	7%
Need Hot Spare Laptop **Because their laptop was being serviced	43	2%
Forgot Laptop	80	5%
Laptop Won't Boot	41	2%
Google Drive	62	3%

Professional Development/Teacher Discourse

Professional development has been and continues to be a vital component to the success of technology integration within the Middleton School District. The District's Technology Integration Specialists plan and implement opportunities for staff to enhance technology integration to enhance student learning.

Professional development, both formal and informal, have taken place throughout the process of the laptop integration. Listed below are the formal opportunities that have been offered to staff.

July 18, 19 -- District-wide Google Bootcamp Basics
August 16, 19 -- District-wide Google Bootcamp Basics
August-December -- Transitioning to Google Apps: Classroom Integration Strategies
August-December -- My Big Campus in the Classroom
October 3 -- Tech-Tober Fest
January-March -- Google Sites as Portfolios

Tech-Tober Fest was a one-day conference that was orchestrated by the District's Technology Integration Advisory Team (TIAT). While this was a District-wide professional development opportunity, several sessions focused specifically on 1:1 integration.

There have also been several informal teacher-created opportunities, which helped foster a tech-sharing culture within the school. For example, one struggle that several teachers initially faced with the switch to Google was managing the paper flow. One teacher found a great tool to assist with this and he hosted time where he could share that information with others to help get them started as well. Since that time, other teachers have also shared their knowledge with others as they continue to dialogue about successes and setbacks they face.

During 56% of Principal walk-throughs students were using their laptops in the classroom. The Principal's anecdotal comments were that those teachers who were not utilizing laptops at that particular time were doing so because the laptop was not needed for that instructional element.

In December 2013, stakeholders were given the BrightBytes survey. In relation to teacher skills levels (in the categories of foundational skills, online skills, multi-media skills), the survey scorecard showed teachers as proficient or above in all categories. This is due in part to the ongoing professional development provided and taken by staff. Teachers have access to a building level technology integration specialist who is able to provide classroom support to teachers as needed.

Other highlights from the BrightBytes survey show that 82% of the teachers who responded agreed that technology both enhances learning and their daily lives. This data demonstrates the teachers' understanding of the importance of technology. In addition, 79% of teachers felt they could solve their own tech problems and 77% reported they could learn new technologies easily.

Device Rollout

Table 8

Date	Description
July 2013	July 1 -- Grant award notification July 18, 19 -- District-wide Google training
August 2013	August 1 -- 1:1 Advisor in place August 2 -- Submitted article to Gazette to invite parents/students to high school open house August 7 -- Laptops shipped from Lenovo August 8 -- 1:1 policies in place August 15 -- MHS open house August 16, 19 -- District-wide Google Training August 28 -- Laptop arrival August 28 -- Department Head meeting to work on student portfolio requirements August 29 -- 1:1 Parent Night
September 2013	September 3 -- Help Desk Manager hired September 3 -- Department Head meeting to work on student portfolio requirements September 6 -- Meeting with IT Help Desk students September 7-8 -- Prepped, labeled and imaged 10th - 12th grade laptops September 9 -- 1:1 Interview with Idaho Educational News September 10 -- Spanish Parent Night

	September 19-20 -- Senior Laptop Deployment September 23-24 -- Junior Laptop Deployment September 25 -- Department Head meeting to continue work on student portfolios September 26-27 -- Sophomore Laptop Deployment September 28 -- Prepped, labeled and imaged Freshmen laptops Sept. 30-Oct. 1 -- Freshmen Laptop Deployment
October 2013	October 3 -- District-wide Tech-Tober Fest October 7 -- Department Head meeting to continue work on student portfolios October 7 -- Make-up Laptop Deployment October 9 -- IT Assist available to students October 17 -- iPad Deployment meeting to Special Ed staff October 29 -- Department Head meeting to finalize student portfolio October 30 -- iPad Deployment October 30 -- Inter-District Google Collaboration (Boise, Weiser, Kuna, Middleton)
November 2013	November 7 -- Counselor's meeting to review student portfolio November 18-19 -- Students receive information regarding student portfolio
December 2013	December 20 -- Teachers submit approved learning artifacts for student portfolio
January 2014	January 2014 -- Seniors clone student portfolio website template

Student Discipline/Digital Citizenship

Table 9

Discipline Issue	Class of 2014 (234)	Class of 2015 (247)	Class of 2016 (283)	Class of 2017 (285)
Policy/Handbook	3	4	0	8
Digital Citizenship	5	2	10	5
Lost/Stolen/Broken	4	5	5	12

Middleton High School is using the Common Sense Media digital citizenship curriculum for all students that is implemented in Advisory classes. During the course of four years, students will be exposed to 20 different lessons that focus on various aspects of digital citizenship.

With that said, one area from the BrightBytes survey that showed a need for more professional development was digital citizenship as only 44% considered themselves as highly knowledgeable. In addition, the student survey showed that only 13% of students considered themselves a highly knowledgeable with regard to digital citizenship. Future professional development plans include continuing to increase staff knowledge about digital citizenship so that it can be reinforced within content classrooms. We will work to continue to cohesively integrate the lessons into the Advisory curriculum and make them more meaningful and relevant to students. In addition, the TIAT will begin work on focusing a district-wide community education component to augment parent knowledge of digital citizenship and literacy as well.

Fiscal Savings/Budget Update

Table 10

Date of Purchase	Item	Purpose	Amount
7/11/2013	Lenovo Thinkpad x131e laptops	Purchased to prep for 1:1 laptops	$ 1,142.04
8/6/2013	945 - Lenovo x131e Laptops	Ordered first set of laptops	$ 448,875.00
8/16/2013	Additional wireless access points	Purchased to increase wireless coverage for 1:1 laptops	$ 8,902.00
8/27/2013	175 - Lenovo x131e Laptops	Ordered second set of laptops	$ 83,125.00
8/27/2013	1100 - Protective laptop sleeves	Used to help protect and identify MSD owned student laptops	$7,579.00
8/28/2013	Lightspeed Web Filtering	Web filtering licenses (1,100) for MHS students	$ 3,300.00
9/3/2013	iPads and supplies for Special Ed students	Ordered the iPad's and supplies for Special Ed students	$ 17,768.23
9/12/2013	Domain name / SSL certificate purchases	Purchased domain names for vikings134.org and mhs1-1.com	$ 84.50
9/19/2013	Additional batteries and battery chargers for laptops	Needed for hot spares and charging the hot spares	$ 8,549.99
11/27/2013	Gaggle Filtering for Google Apps	Purchased 1,100 licenses to filter content of Google Apps student accounts	$ 1,237.00
9/6/13 - 10/15/13	Food/Drink costs	Food/Drink costs to feed staff that prepared laptops	$ 460.41
9/6/13 - 10/15/13	Supplies costs	Supplies costs for preparation of laptops	$ 988.01
		TOTAL EXPENSES	**$582,011.18**
	Funding	**State**	**$427,878.32**
		In-Kind Contribution from School District	**$154,132.86**
		TOTAL REVENUES	**$582,011.18**

Next Steps/Project Revisions

Items completed in green Items revised in red

Table 11

Date	Description
Summer 2013	• Adopt revised technology policies • Adopt Common Sense Media Digital Citizenship Curriculum • Adopt website portfolio guidelines and template for students • Develop professional development opportunities for staff
Fall 2013	Teachers • District-wide deployment of Google Apps for Education • Teachers develop technology integration PD goals • ~~Teachers receive laptops and continued integration PD~~ • Teachers develop lessons plans aligned to Idaho Core that students will be able to use as learning artifacts in their portfolios. • ~~Teachers trained on Schoolnet integration~~ Students • District-wide deployment of Google Apps for Education • Create student-run help desk Parents • Provide overview of the **Go One-Go On** program
Spring 2014	Teachers • Continued technology integration PD (emphasis on **Go One-Go On**) ○ Google Sites as Portfolios (January-March) Students • Students receive laptops and PD to facilitate policies, procedures and continued digital citizenship curriculum (revised Fall 2013) • Students begin creating website portfolios (in progress) • Laptop collection process (May 2014) Parents • Parent **Go One-Go On** orientation (revised Fall 2013)
Summer 2014	• Leadership Team assesses **Go One-Go On** goals/objectives (revised to Summer 2014) • Summer re-imaging • Re-visit policies/procedures
Fall 2014	• Freshmen deployment • Sophomore-Senior re-deployment • Additional professional development (4Cs, digital citizenship) • Teachers develop technology integration PD goals

Conclusion: This is a great program for the students enrolled in Middleton High School, providing an equal opportunity for all students in their academic development and college / career readiness.